

## ABSTRACT

A method for implementing a pseudo random sequence (PRS) generator is disclosed.

Relationships between outputs of flip-flops of an initial model PRS generator at a current time step  $t$  with the outputs of the flip-flops at a time step  $t-n$  is determined, where  $n$  is a number of

5 coefficients to be generated per time step. Flip-flops in the multi-step PRS generator are coupled in response to the relationships between the outputs of the flip-flops at the current time step  $t$  with the output of the flip-flops at the time step  $t-n$ .